BINARY HYSTERESIS EQUAL COMPARATOR CIRCUITS AND METHODS

ABSTRACT

Binary hysteresis equal comparator circuits and methods.
An equal comparator does not indicate an equal condition
until the two binary input values are exactly the same.
However, after the two binary input values first become
equal, a window of variation comes into effect, within which
the first of the two values is allowed to vary while the
circuit continues to report an equal condition. This window
can extend only above the equal condition, only below the
equal condition, or both above and below the equal condition.
The width of the window is determined by providing one or two
predetermined constant values, a first constant defining the
amount of hysteresis provided above the second value, and a
second constant defining the amount of hysteresis provided
below the second value. Related methods are also described
of performing equal comparisons while providing binary
hysteresis.